IN THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) A method for regeneration of a particulate filter ~~(7)~~ situated on an exhaust line ~~(5)~~ of an engine ~~(3) of a motor vehicle (1)~~, the method ~~being of the type in which, from~~ comprising determining a soot burden on the filter based on knowledge of ~~the~~ a differential pressure ΔP at ~~the~~ ends of the ~~said~~ filter ~~(7)~~ and of ~~the~~ a pressure Pupstream upstream from the ~~said~~ filter ~~(7), the soot burden of the said filter (7) is determined for the purpose of~~ and triggering combustion of the ~~said~~ soot when the burden reaches a predetermined level, ~~characterized in that the~~ wherein a pressure Pdownstream downstream from the ~~said~~ filter ~~(7)~~ is modeled without use of a pressure sensor and ~~in that~~ Pupstream is determined without use of a pressure sensor using the relationship Pupstream = ΔP + Pdownstream.

2. (Currently Amended) A method according to claim 1, ~~characterized in that~~ wherein the ~~said~~ burden is determined by ~~means of~~ the relationship:

ΔP = f (Qvol, mass of soot), with:

Qvol = K x (Qair + ρfuel x Qcarb) x N x Tupstream / Pupstream, where:

[[-]] K is a constant,

[[-]] Qair denotes ~~the~~ a mass flow of air provided to the engine and measured by a flowmeter,

[[-]] ~~ρfuel~~ ρfuel denotes ~~the~~ a density of the ~~diesel~~ fuel injected into the engine,

[[-]] Qcarb denotes ~~the~~ a volumetric quantity of ~~diesel~~ fuel injected into the ~~said~~ engine ~~(3)~~,

[[-]] N denotes ~~the~~ an rpm of the ~~said~~ engine ~~(3)~~, and

[[-]] Tupstream denotes ~~the~~ an absolute temperature measured upstream from the ~~said~~ filter ~~(7)~~.

3. (Canceled)

4. (Canceled)

5. (New) A device for regeneration of a particulate filter situated on an exhaust line of an engine, the device comprising:

a differential pressure sensor configured to determine a differential pressure ΔP at ends of the filter; and

a controller configured to determine a soot burden on the filter based on knowledge of the differential pressure ΔP and of a pressure Pupstream upstream from the filter and configured to trigger combustion of the soot when the burden reaches a predetermined level, wherein a pressure Pdownstream downstream from the filter is modeled without use of a pressure sensor and Pupstream is determined without use of a pressure sensor using the relationship Pupstream = ΔP + Pdownstream.

6. (New) A device according to claim 5, wherein said controller is configured to determine the burden by the relationship:

ΔP = f (Qvol, mass of soot), with:

Qvol = K x (Qair + ρfuel x Qcarb) x N x Tupstream / Pupstream, where:

K is a constant,

Qair denotes a mass flow of air provided to the engine and measured by a flowmeter,

ρfuel denotes a density of the fuel injected into the engine,

Qcarb denotes a volumetric quantity of fuel injected into the engine,

N denotes an rpm of the engine, and

Tupstream denotes an absolute temperature measured upstream from the filter.

7. (New) A motor vehicle comprising:

an engine having an exhaust line;

a particulate filter provided along said exhaust line; and

a device configured to regenerate said particulate filter, said device comprising:

a differential pressure sensor configured to determine a differential pressure ΔP at ends of said filter, and

a controller configured to determine a soot burden on said filter based on knowledge of the differential pressure ΔP and of a pressure Pupstream upstream from said filter and configured to trigger combustion of the soot when the burden reaches a predetermined level, wherein a pressure Pdownstream downstream from said filter is modeled without use of a pressure sensor and Pupstream is determined without use of a pressure sensor using the relationship Pupstream = ΔP + Pdownstream.

8. (New) A motor vehicle according to claim 7, wherein said controller is configured to determine the burden by the relationship:

ΔP = f (Qvol, mass of soot), with:

Qvol = K x (Qair + ρfuel x Qcarb) x N x Tupstream / Pupstream, where:

K is a constant,

Qair denotes a mass flow of air provided to said engine and measured by a flowmeter,

ρfuel denotes a density of the fuel injected into said engine,

Qcarb denotes a volumetric quantity of fuel injected into said engine,

N denotes an rpm of said engine, and

Tupstream denotes an absolute temperature measured upstream from said filter.